



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

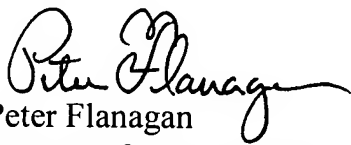
APPEAL BRIEF FOR THE APPELLANTS

Ex parte Markus WARSTA *et al.*

METHOD AND APPARATUS FOR STORING SUBSCRIBER DATA

Serial No. 10/528,018
Appeal No.: not yet assigned
Group Art Unit: 2617

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Appeal Brief



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Appellant:

Confirmation No.: 9317

Markus WARSTA *et al.*

Appeal No.: Not yet assigned

Serial Number: 10/528,018

Group Art Unit: 2617

Filed: May 12, 2005

Examiner: Willie J. Daniel Jr.

For: METHOD AND APPARATUS FOR STORING SUBSCRIBER DATA

BRIEF ON APPEAL

June 22, 2009

I. INTRODUCTION

This is an appeal from the final rejection set forth in an Official Action dated October 16, 2008, finally rejecting claims 1-8, 10-13, 15, and 17-41, all of the claims pending in this application. Claims 1-5, 10-13, 15, 19-25, 28-29, 32-36, and 39-41 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Publication No. 2003/0092436 of Boivin ("Boivin"). Claims 6-8, 26-27, 30-31, and 37-38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boivin in view of U.S. Publication No. 2004/0132449 of Kowarsch ("Kowarsch"). Claims 17-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boivin in view of U.S. Publication No. 2003/0190913 of Coad ("Coad").

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A Request for Reconsideration was timely filed on November 17, 2008, including minor amendments to the claims. An Advisory Action was issued on December 9, 2008,

indicating that the amendments filed on November 17, 2008, would not be entered because they were not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal. A Notice of Appeal and Pre-Appeal Brief Request for Review were timely filed on January 16, 2009. A Notice of Panel Decision indicating that the application remains under appeal was mailed on May 20, 2009. This Appeal Brief is being timely filed within one month of the Notice of Panel Decision.

II. REAL PARTY IN INTEREST

The real party in interest in this application is Nokia Corporation of Espoo, Finland, by virtue of an Assignment by the inventors, which assignment was recorded at Reel 016739, Frame 0455, on May 12, 2005.

III. STATEMENT OF RELATED APPEALS AND INTERFERENCES

There are no known related appeals and/or interferences which will directly effect or be directly effected by or have a bearing on the Board's decision in this appeal.

IV. STATUS OF CLAIMS

Claims 1-8, 10-13, 15, and 17-41, all of the claims pending in the present application, are the subject of this appeal. Claims 9, 14, and 16 were previously cancelled.

Claims 1-5, 10-13, 15, 19-25, 28-29, 32-36, and 39-41 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Publication No. 2003/0092436 of Boivin (“Boivin”).

Claims 6-8, 26-27, 30-31, and 37-38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boivin in view of U.S. Publication No. 2004/0132449 of Kowarsch (“Kowarsch”). Claims 17-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boivin in view of U.S. Publication No. 2003/0190913 of Coad (“Coad”).

V. STATUS OF AMENDMENTS

An amendment was included with the response that was filed on November 17, 2008. That amendment has **not** been entered for purposes of appeal, according to the Advisory Action mailed December 9, 2008. The claims are shown in the appropriate appendix to this brief, with the amendments unentered (*i.e.* as they stood prior to the requested amendments). Since the amendments were simply to spell out abbreviations, it is unclear why these amendments were not entered.

VI. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1, upon which claims 2-8, 10-13, 25, and 17-18 depend, is directed to a method including receiving (*See, for example*, first box from top in Figure 4) at a routing register (*See, for example*, VLR 12 in Figure 6 or MSC/VLR 12 in Figure 3) a message associated with an inactive subscriber of a communications network and including data relating to the identity of said subscriber (*See, for example*, message 31 in Figure 3 or message 51 in Figure 6). The method also includes, based on the identity of said subscriber and on routing information stored at said routing register (*See, for example*, VLR 12 in Figure 6 or MSC/VLR 12 in Figure 3), selectively routing (*See, for example*, second box from top in Figure 4) said message from said routing register (*See, for example*, VLR 12 in Figure 6 or MSC/VLR 12 in Figure 3) to an inactive subscriber register (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5) for storing subscriber data for inactive subscribers (*See, for example*, message 32 in Figure 3 or message 52 in Figure 6). The method further includes updating (*See, for example*, messages 34 in Figure 3 and last box from the top in Figure 4) said routing information associated with the subscriber at the routing register (*See, for example*, VLR 12 in Figure 6 or MSC/VLR 12 in Figure 3) to route subsequent signaling associated with the subscriber to an active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6), which after the receipt of said message at the inactive subscriber register (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5) is provisioned with subscriber data required by the active subscriber register

(*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6) to service said subscriber (*See, for example*, box “Provision NE’s ...” in Figure 3 or Figure 6 and second box from the bottom in Figure 4).

Independent claim 19 is directed to a system (*See, for example*, Figure 5). The system includes an active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6). The system also includes an inactive subscriber register (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5), which includes a storage configured to store subscriber data for inactive subscribers of a communication network (*See, for example*, page 9, lines 10-17, of the application), a receiver configured to receive a message identifying an inactive subscriber to be activated (*See, for example*, page 10, lines 24-30, of the application), and a processor configured to provision the active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6) of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message (*See, for example*, box “Provision NE’s ...” in Figure 3 or Figure 6 and second box from the bottom in Figure 4). The system also includes a routing register (*See, for example*, VLR 12 in Figure 6 or MSC/VLR 12 in Figure 3), which includes a storage configured to store routing information relating to the identity of a plurality of subscribers of a communication network (*See, for example*, page 10, lines 24-30, of the application), and a processor (*See, for example*, page 7, lines 18-25, of the application) configured to route (*See, for example*, second box from top in Figure 4)

signaling associated with inactive subscribers to an inactive subscriber register (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5), and configured to update (*See, for example*, messages 34 in Figure 3 and last box from the top in Figure 4) said routing information for at least one of said inactive subscribers to route signaling to an active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6) when said at least one of said inactive subscribers becomes active.

Independent claim 20, upon which claims 24-31 depend, is directed to an apparatus (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5). The apparatus includes a storage configured to store subscriber data for inactive subscribers of a communication network (*See, for example*, page 9, lines 10-17, of the application). The apparatus also includes a receiver configured to receive a message identifying an inactive subscriber to be activated (*See, for example*, page 10, lines 24-30, of the application). The apparatus further includes a processor configured to provision an active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6) of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message (*See, for example*, box “Provision NE’s ...” in Figure 3 or Figure 6 and second box from the bottom in Figure 4).

Independent claim 21, upon which claims 33-34 depend, is directed to an apparatus (*See, for example*, VLR 12 in Figure 6 or MSC/VLR 12 in Figure 3). The apparatus includes a storage configured to store routing information relating to the identity of a

plurality of subscribers of a communication network (*See, for example*, page 10, lines 24-30, of the application). The apparatus also includes a processor (*See, for example*, page 7, lines 18-25, of the application) configured to route (*See, for example*, second box from top in Figure 4) signaling associated with inactive subscribers to an inactive subscriber register (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5), and configured to update (*See, for example*, messages 34 in Figure 3 and last box from the top in Figure 4) said routing information for at least one of said inactive subscribers to route signaling to an active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6) when said at least one of said inactive subscribers becomes active.

Independent claim 22 is directed to a computer program embodied on a computer-readable medium, the computer program configured to control a processor to perform operations (*See, for example*, VLR 12 in Figure 6 or MSC/VLR 12 in Figure 3). The operations include receiving (*See, for example*, first box from top in Figure 4) at a routing register (*See, for example*, VLR 12 in Figure 6 or MSC/VLR 12 in Figure 3) a message associated with an inactive subscriber of a communication network and including data relating to the identity of said subscriber (*See, for example*, message 31 in Figure 3 or message 51 in Figure 6). The operations also include, based on the identity of said subscriber and on routing information stored at said routing register (*See, for example*, VLR 12 in Figure 6 or MSC/VLR 12 in Figure 3), selectively routing (*See, for example*, second box from top in Figure 4) said message from said routing register (*See, for example*, VLR

12 in Figure 6 or MSC/VLR 12 in Figure 3) to an active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6) for storing subscriber data for inactive subscribers (*See, for example*, message 32 in Figure 3 or message 52 in Figure 6). The operations also include updating (*See, for example*, messages 34 in Figure 3 and last box from the top in Figure 4) said routing information associated with the subscriber at the routing register (*See, for example*, VLR 12 in Figure 6 or MSC/VLR 12 in Figure 3) to route subsequent signaling associated with the subscriber to an active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6), which after the receipt of said message at the inactive subscriber register (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5) is provisioned with subscriber data required by the active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6) to service said subscriber (*See, for example*, box “Provision NE’s ...” in Figure 3 or Figure 6 and second box from the bottom in Figure 4).

Independent claim 23, upon which claims 35-40 depend, is directed to a method including storing (*See, for example*, page 9, lines 10-17, of the application) subscriber data for inactive subscribers of a communication network at an inactive subscriber register (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5). The method also includes receiving (*See, for example*, page 10, lines 24-30, of the application) at said inactive subscriber register (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5) a message identifying an inactive subscriber to be activated. The method

further includes provisioning an active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6) of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message (*See, for example*, box “Provision NE’s ...” in Figure 3 or Figure 6 and second box from the bottom in Figure 4).

Independent claim 32 is directed to a service routing register (*See, for example*, VLR 12 in Figure 6 or MSC/VLR 12 in Figure 3). The service routing register includes a storage configured to store routing information relating to the identity of a plurality of subscribers of a communication network (*See, for example*, page 10, lines 24-30, of the application). The service routing register also includes a processor (*See, for example*, page 7, lines 18-25, of the application) configured to route (*See, for example*, second box from top in Figure 4) signaling associated with inactive subscribers to an inactive subscriber register (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5), and configured to update (*See, for example*, messages 34 in Figure 3 and last box from the top in Figure 4) said routing information for at least one of said inactive subscribers to route signaling to an active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6) when said at least one of said inactive subscribers becomes active.

Independent claim 41 is directed to a computer program embodied on a computer-readable medium, the computer program configured to control a processor to perform operations (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure

5). The operations include storing (*See, for example*, page 9, lines 10-17, of the application) subscriber data for inactive subscribers of a communication network at an inactive subscriber register (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5, and page 9, lines 10-17, of the application). The operations also include receiving (*See, for example*, page 10, lines 24-30, of the application) at said inactive subscriber register (*See, for example*, SRRi 13 in Figure 3 or Figure 6 or SRR 13 in Figure 5) a message identifying an inactive subscriber to be activated (*See, for example*, page 10, lines 24-30, of the application). The operations further include provisioning an active subscriber register (*See, for example*, HLR 15 in Figure 3, Figure 5, or Figure 6) of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message (*See, for example*, box “Provision NE’s ...” in Figure 3 or Figure 6 and second box from the bottom in Figure 4).

VII. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on appeal are the specific, detailed rejections of each of claims 1-8, 10-13, 15, and 17-41 respectively under 35 U.S.C. §102(e) and §103(a) exactly as set forth in the Office Action of October 16, 2008, at pages 2-11. To summarize those grounds, claims 1-5, 10-13, 15, 19-25, 28-29, 32-36, and 39-41 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Publication No. 2003/0092436 of Boivin ("Boivin"). Claims 6-8, 26-27, 30-31, and 37-38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boivin in view of U.S. Publication No. 2004/0132449 of Kowarsch ("Kowarsch"). Claims 17-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boivin in view of U.S. Publication No. 2003/0190913 of Coad ("Coad").

VIII. APPELLANT'S ARGUMENTS

Appellant respectfully submits that each of pending claims 1-8, 10-13, 15, and 17-41 recites subject matter that is not taught, disclosed, or suggested by the cited art. Each of the claims is being argued separately under a separate sub-heading as suggested by 37 CFR 41.37(c)(1)(vii), and thus each of the claims stands or falls alone.

A. Rejection for Alleged Anticipation by Boivin

Claims 1-5, 10-13, 15, 19-25, 28, 29, 32-36, and 39-41 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Publication No. 2003/0092436 ("Boivin"). Applicant traverses this rejection as follows.

As a preliminary matter it is noted that Boivin does not qualify as prior art under a literal and plain reading of 35 U.S.C. 102(e), since Boivin's filing date (November 9, 2001) is not prior to the properly perfected priority date of the present application (September 18, 2002). Applicants recognize that the MPEP states that the USPTO can use an application's U.S. effective filing date for purposes of 35 U.S.C. 102(e), but there is no such provision in 35 U.S.C. 102(e), and the MPEP is not an example of the rule-making authority of the USPTO in interpreting the statute. Thus, this error in the MPEP should not be followed, but the plain reading of the statute should be followed, and Boivin should be disqualified as prior art because it was not filed before the filing date of the present application.

Additionally, even if the MPEP's interpretation of 35 U.S.C. 102(e) were proper (not admitted), the subject matter of Boivin could only be considered prior art to the extent

that it was included in the prior application to which Boivin claims priority. The provisional application to which Boivin claims priority is simply a one-page disclosure that lacks any of the figures or paragraphs relied-upon in the rejection. No attempt in the Office Action has been made to show that the parts of Boivin relied-upon in the rejection are themselves present in the application to which Boivin claims priority, and without such material and correlation, the rejection based on Boivin cannot be a *prima facie* rejection, since a *prima facie* rejection must not be based on material that was included in Boivin only after the filing date of the present application.

Furthermore, it is respectfully submitted that even if the material of Boivin were prior art (not admitted), the rejection is not a *prima facie* rejection. As outlined in MPEP 2131, in order for a reference to anticipate a claim, the reference must teach every element of the claim. A claim is only anticipated if each and every element of the claim is described, either inherently or expressly, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987).

It is a requirement for a proper anticipation rejection under 35 U.S.C. § 102 that “[t]he identical invention must be shown in **as complete detail** as is contained in the ... claim.’ *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)” (emphasis added). Moreover, “[e]very element of the claimed invention must be literally present, **arranged as in the claim.**” *Id.* (emphasis added). It is respectfully submitted that Boivin does not disclose the invention in as complete detail as claimed nor

as arranged in the claim, with respect to each of the claims.

Boivin generally discusses a method and system that enables customers to reuse old telephone numbers. In Boivin, when a customer buys a first mobile phone, the customer is assigned a phone number which is stored once an account for the first mobile phone expires. Upon buying a second mobile phone, the Boivin system enables the customer to use a new phone number for the second mobile phone or reuse the number of the first mobile phone. This enables a customer to buy multiple mobile phones and still maintain the same phone number.

More specifically, Boivin discusses a system and method for reuse of a terminating telephone number with multiple mobile telephones. In Boivin, a customer places a first call on a recently activated disposable/recyclable cell phone (RDP) 214, and a mobile switching center (MSC) 208 connects the call to a PSP 202, based on a mobile identification number (MIN) of the RDP. The prepared server platform (PSP) 202 connects the call to a server 218 configured to use the MIN to determine whether the RDP 214 is newly activated. In scenarios where the RDP 214 is newly activated, the server 218 connects the call to an interactive voice response (IVR) unit 222 that prompts the user indicate whether the user is a new user of RDPs. If the user is a new user, then the default phone number is retained and the call is completed. However, if the user is a returning user, then the IVR unit 222 prompts the user to indicate whether the user would like to use a new phone number for the new RDP or reuse a phone number of a previous RDP. If the user wishes to reuse a

previous phone number, then the IVR unit 222 prompts the user to enter the previously used phone number, and the server 218 communicates with a database 220 to determine whether the entered phone number is currently inactive and available for use. If the phone number is available, then it is assigned to the RDP 214. However, if the phone number is unavailable, then the RDP 214 is assigned the default phone number. Consequently, the communication system of Boivin operates based on MINs and previously used telephone numbers. This approach of Boivin contrasts with the claimed invention, at least for the following reasons.

1. Claim 1

Boivin fails to disclose or suggest “selectively routing said message from said routing register to an inactive subscriber register for storing subscriber data for inactive subscribers,” as recited in claim 1.

The Office Action took the position that these features are disclosed by Boivin in Figures 2-3 and paragraphs [0018]-[0020], [0025]-[0026]. However, these portions of Boivin do not disclose the foregoing limitations. Figure 2 of Boivin depicts a block diagram of a mobile communication network, and Figure 3 of Boivin depicts a process for reusing a phone number of an RDP 214. Paragraphs [0018]-[0020] of Boivin discuss a visitor location register (VLR) 118 that is updated with information of the mobile phones within its service area, a home location register (HLR) that stores management data relating to the mobile phones that correspond thereto, and a service control point (SCP) that

provides routing data needed for advanced network services.

Further, paragraphs [0025]-[0026] of Boivin discuss a customer that places a first call on a recently activated RDP 214, and a MSC 208 that connects the call to a PSP 202, based on a MIN of the RDP. The PSP 202 connects the call to a server 218, and the server 218 uses the MIN to determine whether the RDP 214 is newly activated. Accordingly, while these portions of Boivin may arguably discuss subject matter pertinent to reusing a previous phone number, these portions of Boivin do not disclose or suggest, “a routing register,” “an inactive subscriber register,” or “routing said message from said routing register to an inactive subscriber register,” or any similar feature.

Boivin fails to disclose or suggest “updating said routing information associated with the subscriber at the routing register to route subsequent signaling associated with the subscriber to an active subscriber register, which after the receipt of said message at the inactive subscriber register is provisioned with subscriber data required by the active subscriber register to service said subscriber,” as recited in claim 1.

Instead, Boivin discloses that when a customer places a new call on a recently activated RDP 214. An MSC 208 connects the call with a PSP 202 based on the MIN of the RDP. The PSP 202 connects the call to a server 218 to determine that the RDP is new. The server 218 then connects the calls to an IVR 222, which determines that the user has a previous phone number that the user wishes to associate with the new phone. The IVR verifies that the previous phone number is currently inactive, and sends the previous phone

number to the MSC 208, so that the previous phone number is associated with the MIN of the RDP, thereby enabling the new phone to have the previous phone number.

It appears that the Office Action believes the PSP 202 to be comparable to the inactive subscriber register recited in the claims. In paragraph [0025] of Boivin, the server 218 uses the phone MIN to obtain information for determining that the phone is new. However, the PSP 202 is not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register. Additionally, the server 218 is disclosed as sending a directory/MIN combination to MSC 208, which stores the association of the previous phone number and the MIN of the phone. However, similar to the PSP 202, these features are not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register.

The Office Action took the position that these limitations are disclosed by Boivin in Figure 3 and paragraphs [0019]-[0020], [0028], and [0030]. However, these portions of Boivin fail to disclose or suggest all the features of the claimed “updating.” As mentioned above, paragraphs [0019]-[0020] discuss a VLR, an HLR and an SCP. Paragraphs [0028] and [0030] discuss operations for reusing a previous phone number, presented in Figure 3 of Boivin. However, these portions of Boivin do not disclose, “updating said routing information associated with the subscriber at the routing register to route subsequent

signaling associated with the subscriber to an active subscriber register,” or any similar features. Indeed, these portions of Boivin fail to even disclose “a routing register” and “an active subscriber register,” or similar features recited in the claim.

2. Claim 19

Boivin fails to disclose or suggest “route signaling associated with inactive subscribers to an inactive subscriber register,” as recited in claim 19.

The Office Action took the position that these features are disclosed by Boivin in Figures 2-3 and paragraphs [0018]-[0020], [0025]-[0026]. However, these portions of Boivin do not disclose the foregoing limitations. Figure 2 of Boivin depicts a block diagram of a mobile communication network, and Figure 3 of Boivin depicts a process for reusing a phone number of an RDP 214. Paragraphs [0018]-[0020] of Boivin discuss a visitor location register (VLR) 118 that is updated with information of the mobile phones within its service area, a home location register (HLR) that stores management data relating to the mobile phones that correspond thereto, and a service control point (SCP) that provides routing data needed for advanced network services.

Further, paragraphs [0025]-[0026] of Boivin discuss a customer that places a first call on a recently activated RDP 214, and a MSC 208 that connects the call to a PSP 202, based on a MIN of the RDP. The PSP 202 connects the call to a server 218, and the server 218 uses the MIN to determine whether the RDP 214 is newly activated. Accordingly, while these portions of Boivin may arguably discuss subject matter pertinent to reusing a

previous phone number, these portions of Boivin do not disclose or suggest, “a routing register,” “an inactive subscriber register,” or “routing said message from said routing register to an inactive subscriber register,” or any similar feature.

Boivin fails to disclose or suggest “update said routing information for at least one of said inactive subscribers to route signaling to an active subscriber register when said at least one of said inactive subscribers becomes active,” as recited in claim 19.

Instead, Boivin discloses that when a customer places a new call on a recently activated RDP 214. An MSC 208 connects the call with a PSP 202 based on the MIN of the RDP. The PSP 202 connects the call to a server 218 to determine that the RDP is new. The server 218 then connects the calls to an IVR 222, which determines that the user has a previous phone number that the user wishes to associate with the new phone. The IVR verifies that the previous phone number is currently inactive, and sends the previous phone number to the MSC 208, so that the previous phone number is associated with the MIN of the RDP, thereby enabling the new phone to have the previous phone number.

It appears that the Office Action believes the PSP 202 to be comparable to the inactive subscriber register recited in the claims. In paragraph [0025] of Boivin, the server 218 uses the phone MIN to obtain information for determining that the phone is new. However, the PSP 202 is not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register. Additionally, the server 218 is disclosed as sending

a directory/MIN combination to MSC 208, which stores the association of the previous phone number and the MIN of the phone. However, similar to the PSP 202, these features are not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register.

The Office Action took the position that these limitations are disclosed by Boivin in Figure 3 and paragraphs [0019]-[0020], [0028], and [0030]. However, these portions of Boivin fail to disclose or suggest all the features of the claimed “updating.” As mentioned above, paragraphs [0019]-[0020] discuss a VLR, an HLR and an SCP. Paragraphs [0028] and [0030] discuss operations for reusing a previous phone number, presented in Figure 3 of Boivin. However, these portions of Boivin do not disclose, “updating said routing information associated with the subscriber at the routing register to route subsequent signaling associated with the subscriber to an active subscriber register,” or any similar features. Indeed, these portions of Boivin fail to even disclose “a routing register” and “an active subscriber register,” or similar features recited in the claim.

3. Claim 21

Boivin fails to disclose or suggest “route signaling associated with inactive subscribers to an inactive subscriber register,” as recited in claim 21.

The Office Action took the position that these features are disclosed by Boivin in Figures 2-3 and paragraphs [0018]-[0020], [0025]-[0026]. However, these portions of

Boivin do not disclose the foregoing limitations. Figure 2 of Boivin depicts a block diagram of a mobile communication network, and Figure 3 of Boivin depicts a process for reusing a phone number of an RDP 214. Paragraphs [0018]-[0020] of Boivin discuss a visitor location register (VLR) 118 that is updated with information of the mobile phones within its service area, a home location register (HLR) that stores management data relating to the mobile phones that correspond thereto, and a service control point (SCP) that provides routing data needed for advanced network services.

Further, paragraphs [0025]-[0026] of Boivin discuss a customer that places a first call on a recently activated RDP 214, and a MSC 208 that connects the call to a PSP 202, based on a MIN of the RDP. The PSP 202 connects the call to a server 218, and the server 218 uses the MIN to determine whether the RDP 214 is newly activated. Accordingly, while these portions of Boivin may arguably discuss subject matter pertinent to reusing a previous phone number, these portions of Boivin do not disclose or suggest, “a routing register,” “an inactive subscriber register,” or “routing said message from said routing register to an inactive subscriber register,” or any similar feature.

Boivin fails to disclose or suggest “update said routing information for at least one of said inactive subscribers to route signaling to an active subscriber register when said at least one of said inactive subscribers becomes active,” as recited in claim 21.

Instead, Boivin discloses that when a customer places a new call on a recently activated RDP 214. An MSC 208 connects the call with a PSP 202 based on the MIN of the

RDP. The PSP 202 connects the call to a server 218 to determine that the RDP is new. The server 218 then connects the calls to an IVR 222, which determines that the user has a previous phone number that the user wishes to associate with the new phone. The IVR verifies that the previous phone number is currently inactive, and sends the previous phone number to the MSC 208, so that the previous phone number is associated with the MIN of the RDP, thereby enabling the new phone to have the previous phone number.

It appears that the Office Action believes the PSP 202 to be comparable to the inactive subscriber register recited in the claims. In paragraph [0025] of Boivin, the server 218 uses the phone MIN to obtain information for determining that the phone is new. However, the PSP 202 is not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register. Additionally, the server 218 is disclosed as sending a directory/MIN combination to MSC 208, which stores the association of the previous phone number and the MIN of the phone. However, similar to the PSP 202, these features are not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register.

The Office Action took the position that these limitations are disclosed by Boivin in Figure 3 and paragraphs [0019]-[0020], [0028], and [0030]. However, these portions of Boivin fail to disclose or suggest all the features of the claimed “updating.” As mentioned

above, paragraphs [0019]-[0020] discuss a VLR, an HLR and an SCP. Paragraphs [0028] and [0030] discuss operations for reusing a previous phone number, presented in Figure 3 of Boivin. However, these portions of Boivin do not disclose, “updating said routing information associated with the subscriber at the routing register to route subsequent signaling associated with the subscriber to an active subscriber register,” or any similar features. Indeed, these portions of Boivin fail to even disclose “a routing register” and “an active subscriber register,” or similar features recited in the claim.

4. Claim 22

Boivin fails to disclose or suggest “selectively routing said message from said routing register to an active subscriber register for storing subscriber data for inactive subscribers,” as recited in claim 22.

The Office Action took the position that these features are disclosed by Boivin in Figures 2-3 and paragraphs [0018]-[0020], [0025]-[0026]. However, these portions of Boivin do not disclose the foregoing limitations. Figure 2 of Boivin depicts a block diagram of a mobile communication network, and Figure 3 of Boivin depicts a process for reusing a phone number of an RDP 214. Paragraphs [0018]-[0020] of Boivin discuss a visitor location register (VLR) 118 that is updated with information of the mobile phones within its service area, a home location register (HLR) that stores management data relating to the mobile phones that correspond thereto, and a service control point (SCP) that provides routing data needed for advanced network services.

Further, paragraphs [0025]-[0026] of Boivin discuss a customer that places a first call on a recently activated RDP 214, and a MSC 208 that connects the call to a PSP 202, based on a MIN of the RDP. The PSP 202 connects the call to a server 218, and the server 218 uses the MIN to determine whether the RDP 214 is newly activated. Accordingly, while these portions of Boivin may arguably discuss subject matter pertinent to reusing a previous phone number, these portions of Boivin do not disclose or suggest, “a routing register,” “an inactive subscriber register,” or “routing said message from said routing register to an inactive subscriber register,” or any similar feature.

Boivin fails to disclose or suggest “updating said routing information associated with the subscriber at the routing register to route subsequent signaling associated with the subscriber to an active subscriber register, which after the receipt of said message at the inactive subscriber register is provisioned with subscriber data required by the active subscriber register to service said subscriber,” as recited in claim 22.

Instead, Boivin discloses that when a customer places a new call on a recently activated RDP 214. An MSC 208 connects the call with a PSP 202 based on the MIN of the RDP. The PSP 202 connects the call to a server 218 to determine that the RDP is new. The server 218 then connects the calls to an IVR 222, which determines that the user has a previous phone number that the user wishes to associate with the new phone. The IVR verifies that the previous phone number is currently inactive, and sends the previous phone number to the MSC 208, so that the previous phone number is associated with the MIN of

the RDP, thereby enabling the new phone to have the previous phone number.

It appears that the Office Action believes the PSP 202 to be comparable to the inactive subscriber register recited in the claims. In paragraph [0025] of Boivin, the server 218 uses the phone MIN to obtain information for determining that the phone is new. However, the PSP 202 is not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register. Additionally, the server 218 is disclosed as sending a directory/MIN combination to MSC 208, which stores the association of the previous phone number and the MIN of the phone. However, similar to the PSP 202, these features are not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register.

The Office Action took the position that these limitations are disclosed by Boivin in Figure 3 and paragraphs [0019]-[0020], [0028], and [0030]. However, these portions of Boivin fail to disclose or suggest all the features of the claimed “updating.” As mentioned above, paragraphs [0019]-[0020] discuss a VLR, an HLR and an SCP. Paragraphs [0028] and [0030] discuss operations for reusing a previous phone number, presented in Figure 3 of Boivin. However, these portions of Boivin do not disclose, “updating said routing information associated with the subscriber at the routing register to route subsequent signaling associated with the subscriber to an active subscriber register,” or any similar

features. Indeed, these portions of Boivin fail to even disclose “a routing register” and “an active subscriber register,” or similar features recited in the claim.

5. Claim 32

Boivin fails to disclose or suggest “route signaling associated with inactive subscribers to an inactive subscriber register,” as recited in claim 32.

The Office Action took the position that these features are disclosed by Boivin in Figures 2-3 and paragraphs [0018]-[0020], [0025]-[0026]. However, these portions of Boivin do not disclose the foregoing limitations. Figure 2 of Boivin depicts a block diagram of a mobile communication network, and Figure 3 of Boivin depicts a process for reusing a phone number of an RDP 214. Paragraphs [0018]-[0020] of Boivin discuss a visitor location register (VLR) 118 that is updated with information of the mobile phones within its service area, a home location register (HLR) that stores management data relating to the mobile phones that correspond thereto, and a service control point (SCP) that provides routing data needed for advanced network services.

Further, paragraphs [0025]-[0026] of Boivin discuss a customer that places a first call on a recently activated RDP 214, and a MSC 208 that connects the call to a PSP 202, based on a MIN of the RDP. The PSP 202 connects the call to a server 218, and the server 218 uses the MIN to determine whether the RDP 214 is newly activated. Accordingly, while these portions of Boivin may arguably discuss subject matter pertinent to reusing a previous phone number, these portions of Boivin do not disclose or suggest, “a routing

register,” “an inactive subscriber register,” or “routing said message from said routing register to an inactive subscriber register,” or any similar feature.

Boivin fails to disclose or suggest “update said routing information for at least one of said inactive subscribers to route signaling to an active subscriber register when said at least one of said inactive subscribers becomes active,” as recited in claim 32.

Instead, Boivin discloses that when a customer places a new call on a recently activated RDP 214. An MSC 208 connects the call with a PSP 202 based on the MIN of the RDP. The PSP 202 connects the call to a server 218 to determine that the RDP is new. The server 218 then connects the calls to an IVR 222, which determines that the user has a previous phone number that the user wishes to associate with the new phone. The IVR verifies that the previous phone number is currently inactive, and sends the previous phone number to the MSC 208, so that the previous phone number is associated with the MIN of the RDP, thereby enabling the new phone to have the previous phone number.

It appears that the Office Action believes the PSP 202 to be comparable to the inactive subscriber register recited in the claims. In paragraph [0025] of Boivin, the server 218 uses the phone MIN to obtain information for determining that the phone is new. However, the PSP 202 is not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register. Additionally, the server 218 is disclosed as sending a directory/MIN combination to MSC 208, which stores the association of the previous

phone number and the MIN of the phone. However, similar to the PSP 202, these features are not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register.

The Office Action took the position that these limitations are disclosed by Boivin in Figure 3 and paragraphs [0019]-[0020], [0028], and [0030]. However, these portions of Boivin fail to disclose or suggest all the features of the claimed “updating.” As mentioned above, paragraphs [0019]-[0020] discuss a VLR, an HLR and an SCP. Paragraphs [0028] and [0030] discuss operations for reusing a previous phone number, presented in Figure 3 of Boivin. However, these portions of Boivin do not disclose, “updating said routing information associated with the subscriber at the routing register to route subsequent signaling associated with the subscriber to an active subscriber register,” or any similar features. Indeed, these portions of Boivin fail to even disclose “a routing register” and “an active subscriber register,” or similar features recited in the claim.

6. Claim 20

Boivin fails to disclose or suggest “a processor configured to provision an active subscriber register of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message,” as recited in claim 20.

Instead, Boivin discloses that when a customer places a new call on a recently activated RDP 214. An MSC 208 connects the call with a PSP 202 based on the MIN of the

RDP. The PSP 202 connects the call to a server 218 to determine that the RDP is new. The server 218 then connects the calls to an IVR 222, which determines that the user has a previous phone number that the user wishes to associate with the new phone. The IVR verifies that the previous phone number is currently inactive, and sends the previous phone number to the MSC 208, so that the previous phone number is associated with the MIN of the RDP, thereby enabling the new phone to have the previous phone number.

It appears that the Office Action believes the PSP 202 to be comparable to the inactive subscriber register recited in the claims. In paragraph [0025] of Boivin, the server 218 uses the phone MIN to obtain information for determining that the phone is new. However, the PSP 202 is not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register. Additionally, the server 218 is disclosed as sending a directory/MIN combination to MSC 208, which stores the association of the previous phone number and the MIN of the phone. However, similar to the PSP 202, these features are not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register.

The Office Action took the position that these features are disclosed by Boivin in paragraphs [0019]-[0020] and [0030]. As discussed above, paragraphs [0019]-[0020] of Boivin discuss a VLR 118 that is updated with information of the mobile phones within its

service area, a HLR that stores management data relating to the mobile phones that correspond thereto, and a SCP that provides routing data needed for advanced network services. Also as discussed above, paragraph [0030] of Boivin discloses operations for reusing a previous phone number, presented in Figure 3 of Boivin.

Accordingly, these portions of Boivin do not disclose or suggest any subject matter that amounts to “a processor configured to provision the active subscriber register of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message,” or any similar features.

7. Claim 23

Boivin fails to disclose or suggest “provisioning an active subscriber register of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message,” as recited in claim 23.

Instead, Boivin discloses that when a customer places a new call on a recently activated RDP 214. An MSC 208 connects the call with a PSP 202 based on the MIN of the RDP. The PSP 202 connects the call to a server 218 to determine that the RDP is new. The server 218 then connects the calls to an IVR 222, which determines that the user has a previous phone number that the user wishes to associate with the new phone. The IVR verifies that the previous phone number is currently inactive, and sends the previous phone number to the MSC 208, so that the previous phone number is associated with the MIN of the RDP, thereby enabling the new phone to have the previous phone number.

It appears that the Office Action believes the PSP 202 to be comparable to the inactive subscriber register recited in the claims. In paragraph [0025] of Boivin, the server 218 uses the phone MIN to obtain information for determining that the phone is new. However, the PSP 202 is not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register. Additionally, the server 218 is disclosed as sending a directory/MIN combination to MSC 208, which stores the association of the previous phone number and the MIN of the phone. However, similar to the PSP 202, these features are not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register.

The Office Action took the position that these features are disclosed by Boivin in paragraphs [0019]-[0020] and [0030]. As discussed above, paragraphs [0019]-[0020] of Boivin discuss a VLR 118 that is updated with information of the mobile phones within its service area, a HLR that stores management data relating to the mobile phones that correspond thereto, and a SCP that provides routing data needed for advanced network services. Also as discussed above, paragraph [0030] of Boivin discloses operations for reusing a previous phone number, presented in Figure 3 of Boivin.

Accordingly, these portions of Boivin do not disclose or suggest any subject matter that amounts to “a processor configured to provision the active subscriber register of the

communication network with subscriber data associated with the inactive subscriber to be activated based on the received message,” or any similar features.

8. Claim 41

Boivin fails to disclose or suggest “provisioning an active subscriber register of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message,” as recited in claim 41.

Instead, Boivin discloses that when a customer places a new call on a recently activated RDP 214. An MSC 208 connects the call with a PSP 202 based on the MIN of the RDP. The PSP 202 connects the call to a server 218 to determine that the RDP is new. The server 218 then connects the calls to an IVR 222, which determines that the user has a previous phone number that the user wishes to associate with the new phone. The IVR verifies that the previous phone number is currently inactive, and sends the previous phone number to the MSC 208, so that the previous phone number is associated with the MIN of the RDP, thereby enabling the new phone to have the previous phone number.

It appears that the Office Action believes the PSP 202 to be comparable to the inactive subscriber register recited in the claims. In paragraph [0025] of Boivin, the server 218 uses the phone MIN to obtain information for determining that the phone is new. However, the PSP 202 is not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register. Additionally, the server 218 is disclosed as sending

a directory/MIN combination to MSC 208, which stores the association of the previous phone number and the MIN of the phone. However, similar to the PSP 202, these features are not disclosed as provisioning an active subscriber register and/or updating a routing register such that subsequent signaling relating to the activated RDP is routed to an active subscriber register.

The Office Action took the position that these features are disclosed by Boivin in paragraphs [0019]-[0020] and [0030]. As discussed above, paragraphs [0019]-[0020] of Boivin discuss a VLR 118 that is updated with information of the mobile phones within its service area, a HLR that stores management data relating to the mobile phones that correspond thereto, and a SCP that provides routing data needed for advanced network services. Also as discussed above, paragraph [0030] of Boivin discloses operations for reusing a previous phone number, presented in Figure 3 of Boivin.

Accordingly, these portions of Boivin do not disclose or suggest any subject matter that amounts to “a processor configured to provision the active subscriber register of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message,” or any similar features.

9. Claim 2

Claim 2 depends from and further limits claim 1. Thus, claim 2 is patentable for at least the reasons that claim 1 is patentable. Furthermore claim 2 recites features relating to an inactive subscriber register, which are not disclosed in Boivin, since there is no inactive

subscriber register in Boivin. The cited paragraphs, for example, refer to a VLR and MSC, but not to any SRR or SRRi.

10. Claim 3

Claim 3 depends from and further limits claim 1. Thus, claim 3 is patentable for at least the reasons that claim 1 is patentable.

11. Claim 4

Claim 4 depends from and further limits claim 3. Thus, claim 4 is patentable for at least the reasons that claim 3 is patentable.

12. Claim 5

Claim 5 depends from and further limits claim 3. Thus, claim 5 is patentable for at least the reasons that claim 3 is patentable.

13. Claim 10

Claim 10 depends from and further limits claim 1. Thus, claim 10 is patentable for at least the reasons that claim 1 is patentable.

14. Claim 11

Claim 11 depends from and further limits claim 1. Thus, claim 1 is patentable for at least the reasons that claim 11 is patentable.

15. Claim 12

Claim 12 depends from and further limits claim 1. Thus, claim 12 is patentable for at least the reasons that claim 1 is patentable. Furthermore claim 12 recites features relating

to an inactive subscriber register, which are not disclosed in Boivin, since there is no inactive subscriber register in Boivin. The cited paragraphs, for example, refer to a VLR and MSC, but not to any SRR or SRRi.

16. Claim 13

Claim 13 depends from and further limits claim 1. Thus, claim 13 is patentable for at least the reasons that claim 1 is patentable.

17. Claim 15

Claim 15 depends from and further limits claim 1. Thus, claim 15 is patentable for at least the reasons that claim 1 is patentable. Furthermore claim 15 recites features relating to an inactive subscriber register, which are not disclosed in Boivin, since there is no inactive subscriber register in Boivin. The cited figure, for example, shows an MSC, but not any SRR or SRRi.

18. Claim 24

Claim 24 depends from and further limits claim 20. Thus, claim 24 is patentable for at least the reasons that claim 20 is patentable. Furthermore claim 24 recites features relating to an inactive subscriber register, which are not disclosed in Boivin, since there is no inactive subscriber register in Boivin. The cited paragraphs, for example, refer to a VLR and MSC, but not to any SRR or SRRi.

19. Claim 25

Claim 25 depends from and further limits claim 20. Thus, claim 25 is patentable for

at least the reasons that claim 20 is patentable.

20. Claim 28

Claim 28 depends from and further limits claim 20. Thus, claim 28 is patentable for at least the reasons that claim 20 is patentable. Furthermore claim 28 recites features relating to an inactive subscriber register, which are not disclosed in Boivin, since there is no inactive subscriber register in Boivin. The cited figure, for example, shows an MSC, but not any SRR or SRRi.

21. Claim 29

Claim 29 depends from and further limits claim 20. Thus, claim 29 is patentable for at least the reasons that claim 20 is patentable. The rejection of this claim referred back to the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

22. Claim 33

Claim 33 depends from and further limits claim 21. Thus, claim 33 is patentable for at least the reasons that claim 21 is patentable. The rejection of this claim referred back to the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

23. Claim 34

Claim 34 depends from and further limits claim 21. Thus, claim 34 is patentable for at least the reasons that claim 21 is patentable. The rejection of this claim referred back to

the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

24. Claim 35

Claim 35 depends from and further limits claim 23. Thus, claim 35 is patentable for at least the reasons that claim 23 is patentable. The rejection of this claim referred back to the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

25. Claim 36

Claim 36 depends from and further limits claim 23. Thus, claim 36 is patentable for at least the reasons that claim 23 is patentable. The rejection of this claim referred back to the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

26. Claim 39

Claim 39 depends from and further limits claim 23. Thus, claim 39 is patentable for at least the reasons that claim 23 is patentable. The rejection of this claim referred back to the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

27. Claim 40

Claim 40 depends from and further limits claim 23. Thus, claim 40 is patentable for at least the reasons that claim 23 is patentable. The rejection of this claim referred back to

the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

B. Rejection for Alleged Obviousness over Boivin in view of Kowarsch

Claims 6-8, 26, 27, 30, 31, 37, and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boivin in view of U.S. Publication No. 2004/0132449 (“Kowarsch”). The Office Action took the position that Boivin fails to disclose all the limitations of the rejected claims, but that Kowarsch accounts for the deficiencies of Boivin in a manner that renders the rejected claims obvious. Applicant respectfully asserts that a combination of Boivin and Kowarsch fails to disclose or suggest all the limitations of the rejected claims.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of presenting a *prima facie* case of obviousness. *See In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. *See In re Lintner*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972); *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442-43 (Fed. Cir. 1991) (explaining the three elements of a *prima facie* case of obviousness include: (1) motivation for the combination, (2) a reasonable expectation of success, and (3) a disclosure of all the claim elements by the prior art). *See also In re Royka*, 490 F.2d 981,

985, 180 USPQ 580, 583 (CCPA 1974).

Furthermore, the conclusion that the claimed subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. *See In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The Examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption, or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. *See In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967). The Federal Circuit has repeatedly cautioned against employing hindsight by using Appellants' disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. *See, e.g., Grain Processing Corp. v. American Maize-Prods. Co.*, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

When determining obviousness, “the [E]xaminer can satisfy the burden of showing obviousness of the combination ‘only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.’” *In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), citing *In re Fritch*, 972 F.2d 1260, 1265,

23 USPQ2d 1780, 1783 (Fed. Cir. 1992). “Broad conclusory statements regarding the teaching of multiple references, standing alone, are not ‘evidence.’” *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). “Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact.” *Dembiczak*, 175 F.3d at 999-1000, 50 USPQ2d at 1617, *citing McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993). Further, as pointed out by the Federal Circuit, the scope of the claim must be the first determination. “[T]he name of the game is the claim.” *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998).

It is respectfully submitted that the rejection cannot meet the above-identified standard for rejections. For example, the rejection cannot stand without Boivin (which, as discussed above, is not proper prior art). Furthermore, the combination of Boivin and Kowarsch would not disclose all of the features of the claims. Finally, the combination itself is not properly motivated.

Boivin is discussed above. Kowarsch generally discloses a method and apparatus for permitting a mobile station to operate in a visited network. This is achieved by monitoring an attempt by the mobile station to sign onto a visited network, determining whether a predetermined condition is met, and automatically initiating the creation of an account for the mobile station in the visited network.

However, a combination of Boivin and Kowarsch fails to disclose or suggest

“updating said routing information associated with the subscriber at the routing register to route subsequent signaling associated with the subscriber to an active subscriber register, which after the receipt of said message at the inactive subscriber register is provisioned with subscriber data required by the active subscriber register to service said subscriber,” as recited in claim 1, and as similarly recited in claims 20-21 and 23, from which claims 6-8, 26, 27, 30, 31, 37, and 38 depend.

The deficiencies of Boivin with respect to claim 1 are detailed above. In short, Boivin fails to disclose or suggest at least the foregoing limitations. Similarly, Kowarsch also fails to disclose the limitations. Instead, Kowarsch discloses a method and apparatus for permitting a mobile station to operate in a visited network that does not disclose the foregoing limitations.

Accordingly, a combination of Boivin and Kowarsch fails to disclose or suggest all the limitations of claim 1, 20-21 and 23. Additionally, Boivin and Kowarsch fails to disclose or suggest all the limitations of claims 6-8, 26, 27, 30, 31, 37, and 38 for their dependency from claims 1, 20-21 and 23, and for the patentable subject matter recited therein. Therefore, Applicant respectfully requests that the rejection of claims 6-8, 26, 27, 30, 31, 37, and 38 be withdrawn.

1. Claim 6

The rejected claim may be patentable on the basis that it further limits a patentable claim, for the reasons set forth above. Additionally, it should be noted that the rejection of

claim 6 is not proper, because the alleged motivation to modify Boivin to arrive at the claimed invention is not specific to the recitations of the claim, nor is it actually applicable to Boivin. The proposed motivation is “to permit a mobile station from a home network to operate in a visited network,” but this is already possible in Boivin (not the VLRs discussed in Boivin). Thus, the proposed motivation does not lead one of ordinary skill in the art to make the combination at all nor to make the combination with respect to the particular recited features of the claim.

2. Claim 7

The rejected claim may be patentable on the basis that it further limits a patentable claim, for the reasons set forth above. Additionally, it should be noted that the rejection of claim 6 is not proper, because the alleged motivation to modify Boivin to arrive at the claimed invention is not specific to the recitations of the claim, nor is it actually applicable to Boivin. The proposed motivation is “to permit a mobile station from a home network to operate in a visited network,” but this is already possible in Boivin (not the VLRs discussed in Boivin). Thus, the proposed motivation does not lead one of ordinary skill in the art to make the combination at all nor to make the combination with respect to the particular recited features of the claim.

3. Claim 8

The rejected claim may be patentable on the basis that it further limits a patentable claim, for the reasons set forth above. Additionally, it should be noted that the rejection of

claim 6 is not proper, because the alleged motivation to modify Boivin to arrive at the claimed invention is not specific to the recitations of the claim, nor is it actually applicable to Boivin. The proposed motivation is “to permit a mobile station from a home network to operate in a visited network,” but this is already possible in Boivin (not the VLRs discussed in Boivin). Thus, the proposed motivation does not lead one of ordinary skill in the art to make the combination at all nor to make the combination with respect to the particular recited features of the claim.

4. Claim 26

The rejected claim may be patentable on the basis that it further limits a patentable claim, for the reasons set forth above. The rejection of this claim referred back to the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

5. Claim 27

The rejected claim may be patentable on the basis that it further limits a patentable claim, for the reasons set forth above. The rejection of this claim referred back to the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

6. Claim 30

The rejected claim may be patentable on the basis that it further limits a patentable claim, for the reasons set forth above. The rejection of this claim referred back to the

rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

7. Claim 31

The rejected claim may be patentable on the basis that it further limits a patentable claim, for the reasons set forth above. The rejection of this claim referred back to the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

8. Claim 37

The rejected claim may be patentable on the basis that it further limits a patentable claim, for the reasons set forth above. The rejection of this claim referred back to the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

9. Claim 38

The rejected claim may be patentable on the basis that it further limits a patentable claim, for the reasons set forth above. The rejection of this claim referred back to the rejection of previous claims and consequently the discussion of the errors of the previous rejections should be referenced with respect to this claim.

C. Rejection for Alleged Obviousness over Boivin in view of Coad

Claims 17 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boivin in view of U.S. Publication No. 2003/0190913 (“Coad”) (like Boivin, Coad cannot

be considered prior art because it was filed after the priority date of the present application, although the MPEP would take an opposite position). The Office Action took the position that Boivin fails to disclose all the limitations of the rejected claims, but that Coad accounts for the deficiencies of Boivin in a manner that renders the rejected claims obvious. Applicant respectfully asserts that a combination of Boivin and Coad fails to disclose or suggest all the limitations of the rejected claims.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of presenting a *prima facie* case of obviousness. *See In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. *See In re Lintner*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972); *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442-43 (Fed. Cir. 1991) (explaining the three elements of a *prima facie* case of obviousness include: (1) motivation for the combination, (2) a reasonable expectation of success, and (3) a disclosure of all the claim elements by the prior art). *See also In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974).

Furthermore, the conclusion that the claimed subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that

individual to combine the relevant teachings of the references to arrive at the claimed invention. *See In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The Examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption, or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. *See In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967). The Federal Circuit has repeatedly cautioned against employing hindsight by using Appellants' disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. *See, e.g., Grain Processing Corp. v. American Maize-Prods. Co.*, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

When determining obviousness, “the [E]xaminer can satisfy the burden of showing obviousness of the combination ‘only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.’” *In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), citing *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). “Broad conclusory statements regarding the teaching of multiple references, standing alone, are not ‘evidence.’” *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). “Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact.”

Dembiczak, 175 F.3d at 999-1000, 50 USPQ2d at 1617, citing *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993). Further, as pointed out by the Federal Circuit, the scope of the claim must be the first determination. “[T]he name of the game is the claim.” *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998).

It is respectfully submitted that the rejection cannot meet the above-identified standard for rejections. For example, the rejection cannot stand without Boivin (which, as discussed above, is not proper prior art). Furthermore, the combination of Boivin and Coad would not disclose all of the features of the claims. Finally, the combination itself is not properly motivated.

Boivin is discussed above. Coad discloses a solution for enabling a mobile user to make a call by using a pre-paid account that is automatically set up by a visited network. In Coad, an auxiliary HLR recognizes that the user would normally be denied service and, or receipt of a registration request, sets up an account, which is made active in a final stage after notification to the user in a Short Message and payment of funds.

However, a combination of Coad and Boivin fails to disclose or suggest, at least, “updating said routing information associated with the subscriber at the routing register to route subsequent signaling associated with the subscriber to an active subscriber register, which after the receipt of said message at the inactive subscriber register is provisioned with subscriber data required by the active subscriber register to service said subscriber,”

as recited in claim 1, from which claims 17-18 depend.

As described above, Boivin fails to disclose these limitations. Similarly, Coad fails to disclose these limitations. Instead, Coad discloses a communication system where pre-paid cell phone may make calls in a visited network without disclosing the foregoing limitations. Accordingly, a combination of Boivin and Coad fails to disclose or suggest the limitations of claims 17-18, for their dependency from claim 1, and for the patentable subject matter recited therein. Therefore, Applicant respectfully requests that the rejection of claims 17-18 be withdrawn.

1. Claim 17

The rejected claim may be patentable on the basis that it further limits a patentable claim, for the reasons set forth above. Additionally, it should be noted that the rejection of claim 6 is not proper, because the alleged motivation to modify Boivin to arrive at the claimed invention is not specific to the recitations of the claim, nor is it actually applicable to Boivin. The proposed motivation is “to permit a mobile station from a home network to operate in a visited network,” but this is already possible in Boivin (not the VLRs discussed in Boivin). This is the same generic and inadequate alleged motivation as in the previous rejection for alleged obviousness, which demonstrates that this proposed motivation is simply an excuse for improper hindsight reconstruction. Thus, the proposed motivation does not lead one of ordinary skill in the art to make the combination at all nor to make the combination with respect to the particular recited features of the claim.

2. Claim 18

The rejected claim may be patentable on the basis that it further limits a patentable claim, for the reasons set forth above. Additionally, it should be noted that the rejection of claim 6 is not proper, because the alleged motivation to modify Boivin to arrive at the claimed invention is not specific to the recitations of the claim, nor is it actually applicable to Boivin. The proposed motivation is “to permit a mobile station from a home network to operate in a visited network,” but this is already possible in Boivin (not the VLRs discussed in Boivin). Thus, the proposed motivation does not lead one of ordinary skill in the art to make the combination at all nor to make the combination with respect to the particular recited features of the claim.

Conclusion

For all of the above noted reasons, it is strongly contended that certain clear differences exist between the present invention as claimed in claims 1-8, 10-13, 15, and 17-41 and the prior art relied upon by the Examiner. It is further contended that these differences are more than sufficient that the present invention would not have been obvious to a person having ordinary skill in the art at the time the invention was made.


This final rejection being in error, therefore, it is respectfully requested that this honorable Board of Patent Appeals and Interferences reverse the Examiner's decision in this case and indicate the allowability of application claims 1-8, 10-13, 15, and 17-41.

In the event that this paper is not being timely filed, the Applicants respectfully

petition for an appropriate extension of time. Any fees for such an extension together with any additional fees which may be due with respect to this paper may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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Encls: Appendix 1 - Claims on Appeal
Appendix 2 - Evidence
Appendix 3 - Related Proceedings

APPENDIX 1

CLAIMS ON APPEAL

1. (Previously Presented) A method, comprising:

receiving at a routing register a message associated with an inactive subscriber of a communications network and including data relating to the identity of said subscriber;

based on the identity of said subscriber and on routing information stored at said routing register, selectively routing said message from said routing register to an inactive subscriber register for storing subscriber data for inactive subscribers;

and

updating said routing information associated with the subscriber at the routing register to route subsequent signaling associated with the subscriber to an active subscriber register, which after the receipt of said message at the inactive subscriber register is provisioned with subscriber data required by the active subscriber register to service said subscriber.

2. (Previously Presented) The method as claimed in claim 1, further comprising:

storing a plurality of subscriber identities at the inactive subscriber register;

and

provisioning the active subscriber register with subscriber data if the data relating to the identity of the subscriber in the message corresponds to one of said plurality of subscriber identities.

3. (Previously Presented) The method as claimed in claim 1, wherein the message is received from a mobile station of said inactive subscriber.

4. (Previously Presented) The method as claimed in claim 3, wherein the message comprises an international mobile subscriber identity.

5. (Previously Presented) The method as claimed in claim 3, wherein the message further comprises data relating to the location of the mobile station.

6. (Previously Presented) The method as claimed in claim 3, further comprising:

receiving from the inactive subscriber register data for providing the subscriber with a preliminary service.

7. (Previously Presented) The method as claimed in claim 6, wherein said data received from the inactive subscriber register further comprises authentication information.

8. (Previously Presented) The method as claimed in claim 6, wherein said preliminary service comprises notifying the subscriber that a service request has been acknowledged.

10. (Previously Presented) The method as claimed in claim 1, wherein the message is received from a visitor location register.

11. (Previously Presented) The method as claimed in claim 1, wherein the register comprises a service routing register.

12. (Previously Presented) The method as claimed in claim 1, wherein the inactive subscriber register comprises a provisioning home location register.

13. (Previously Presented) The method as claimed in claim 1, wherein the active subscriber register comprises a home location register.

15. (Previously Presented) The method as claimed in claim 1, wherein the inactive subscriber register also functions as one of: a voicemail system entity; a mail server entity; a multimedia messaging server entity; a wireless application part gateway entity; a

prepaid server entity; an intelligent network server; a short message service centre; a location based service centre; a USSD-centre; a GPRS-server; a charging server; and rating server.

17. (Previously Presented) A method as claimed in claim 1, further comprising:
determining in said active subscriber register that the subscriber has again become inactive;
storing subscriber data relating to the subscriber at the inactive subscriber register;
updating the information stored at said routing register to specify said subscriber as inactive such that the routing register routes subsequent signaling associated with the subscriber to the inactive subscriber register; and
deleting subscriber data relating to the subscriber from the active subscriber register.

18. (Previously Presented) The method as claimed in claim 17, further comprising determining that said subscriber has become inactive if the time lapsed since a last message, associated with the subscriber, was routed exceeds a predetermined time.

19. (Previously Presented) A system, comprising:

an active subscriber register;

an inactive subscriber register comprising,

a storage configured to store subscriber data for inactive subscribers of a communication network,

a receiver configured to receive a message identifying an inactive subscriber to be activated, and

a processor configured to provision the active subscriber register of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message; and

a routing register comprising

a storage configured to store routing information relating to the identity of a plurality of subscribers of a communication network, and

a processor configured to

route signaling associated with inactive subscribers to an inactive subscriber register, and

update said routing information for at least one of said inactive subscribers to route signaling to an active subscriber register when said at least one of said inactive subscribers becomes active.

20. (Previously Presented) An apparatus, comprising:

a storage configured to store subscriber data for inactive subscribers of a communication network;

a receiver configured to receive a message identifying an inactive subscriber to be activated; and

a processor configured to provision an active subscriber register of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message.

21. (Previously Presented) An apparatus, comprising:

a storage configured to store routing information relating to the identity of a plurality of subscribers of a communication network;

a processor configured to

route signaling associated with inactive subscribers to an inactive subscriber register, and

update said routing information for at least one of said inactive subscribers to route signaling to an active subscriber register when said at least one of said inactive subscribers becomes active.

22. (Previously Presented) A computer program embodied on a computer-readable medium, the computer program configured to control a processor to

perform operations comprising:

receiving at a routing register a message associated with an inactive subscriber of a communication network and including data relating to the identity of said subscriber;

based on the identity of said subscriber and on routing information stored at said routing register, selectively routing said message from said routing register to an active subscriber register for storing subscriber data for inactive subscribers, and

updating said routing information associated with the subscriber at the routing register to route subsequent signaling associated with the subscriber to an active subscriber register, which after the receipt of said message at the inactive subscriber register is provisioned with subscriber data required by the active subscriber register to service said subscriber.

23. (Previously Presented) A method, comprising:

storing subscriber data for inactive subscribers of a communication network at an inactive subscriber register;

receiving at said inactive subscriber register a message identifying an inactive subscriber to be activated; and

provisioning an active subscriber register of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message.

24. (Previously Presented) The apparatus as claimed in claim 20, which is further configured to:

store a plurality of subscriber identities; and

provision said active subscriber register with subscriber data if the data relating to the identity of the subscriber in the message corresponds to one of said plurality of subscriber identities.

25. (Previously Presented) The apparatus as claimed in claim 20, wherein the message includes an international mobile subscriber identity.

26. (Previously Presented) The apparatus as claimed in claim 20, which is further configured to send to a control centre data for providing the inactive subscriber with a preliminary service.

27. (Previously Presented) The apparatus as claimed in claim 26 wherein said data sent to the control centre comprises authentication information.

28. (Previously Presented) The apparatus as claimed in claim 20, which is further configured to also function as one of: a voicemail system entity; a mail server entity;

a multimedia messaging server entity; a wireless application part gateway entity; a prepaid server entity; intelligent network server; short message service centre; location based service centre; USSD-centre; GPRS-server; charging and rating server.

29. (Previously Presented) The apparatus as claimed in claim 20 wherein the signalling includes an international mobile subscriber identity.

30. (Previously Presented) The apparatus as claimed in claim 20, which is further arranged to receive from the inactive subscriber register data for providing the subscriber with a preliminary service.

31. (Previously Presented) The apparatus as claimed in claim 30, wherein said data received from the inactive subscriber register comprises authentication information.

32. (Previously Presented) A service routing register, comprising:
a storage configured to store routing information relating to the identity of a plurality of subscribers of a communication network;
a processor configured to
route signaling associated with inactive subscribers to an inactive subscriber register, and

update said routing information for at least one of said inactive subscribers to route signaling to an active subscriber register when said at least one of said inactive subscribers becomes active.

33. (Previously Presented) The apparatus as claimed in claim 21, wherein the inactive subscriber register comprises a provisioning home location register.

34. (Previously Presented) The apparatus as claimed in claim 21, wherein the active subscriber register comprises a home location register.

35. (Previously Presented) The method as claimed in claim 23, further comprising:

storing a plurality of subscriber identities at the inactive subscriber register;

and

provisioning said active subscriber register with subscriber data if the data relating to the identity of the subscriber in the message corresponds to one of said plurality of subscriber identities.

36. (Previously Presented) The method as claimed in claim 23, wherein the message includes an international mobile subscriber identity.

37. (Previously Presented) The method as claimed in claim 23, comprising sending from the inactive subscriber register to a control centre data for providing the inactive subscriber with a preliminary service.

38. (Previously Presented) The method as claimed in claim 37, wherein said data sent from the inactive subscriber register to the control centre comprises authentication information.

39. (Previously Presented) The method as claimed in claim 23, wherein the inactive subscriber register comprises a provisioning home location register.

40. (Previously Presented) The method as claimed in claim 23, wherein the inactive subscriber register also functions as one of:

- a voicemail system entity;
- a mail server entity;
- a multimedia messaging server entity;
- a wireless application part gateway entity;
- a prepaid server entity;
- an intelligent network server;

a short message service centre;
a location based service centre;
a USSD-centre;
a GPRS-server; and
a charging and rating server.

41. (Previously Presented) A computer program embodied on a computer-readable medium, the computer program configured to control a processor to perform operations comprising:

storing subscriber data for inactive subscribers of a communication network at an inactive subscriber register;

receiving at said inactive subscriber register a message identifying an inactive subscriber to be activated; and

provisioning an active subscriber register of the communication network with subscriber data associated with the inactive subscriber to be activated based on the received message.

APPENDIX 2

EVIDENCE APPENDIX

No evidence under section 37 C.F.R. 1.130, 1.131, or 1.132 has been entered or will be relied upon by Appellants in this appeal.

APPENDIX 3

RELATED PROCEEDINGS APPENDIX

No decisions of the Board or of any court have been identified under 37 C.F.R.

§41.37(c)(1)(ii).